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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/097,221	06/12/1998	RICHARD L. BERTRAM	LINAB-48525	2701

7590

07/16/2002

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EXAMINER

NOLAN, SANDRA M

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 07/16/2002

23

Please find below and/or attached an Office communication concerning this application or proceeding.

A 9-27

Office Action Summary	Application No.		Applicant(s)	
	09/097,221		BERTRAM	
	Examiner		Art Unit	
	Sandra M. Nolan		1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on April 12, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 47-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 54-60 is/are allowed.
- 6) ☒ Claim(s) 47-49, 52 and 53 is/are rejected.
- 7) ☒ Claim(s) 50, 53 and 60 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claims

1. Claims 47-60 are pending.

Rejections Withdrawn

2. All of the 35 USC 112 rejections of claims 47-50, 51, and 56-60, set forth in sections 8-12 of the January 15, 2002 Office Action (Paper No. 20) are withdrawn in view of the amendments in the response dated April 12, 2002 (Paper No. 22).
3. The 35 USC 103 rejection of claims 47-50, 52-57 and 59-60, set forth in section 14 of Paper No. 20 is withdrawn in view of the arguments presented in Paper No. 22.

Claim Objection

- W/D.
4. Claims 53 and 60 are objected to for the following informalities:

In line 2 of each, the following is recited : "of between 5,000 to 10,000 psi."

This phrase is grammatically incorrect.

It is suggested that the word "between" be deleted from the last line of both claims. Appropriate correction is required.

Allowable Subject Matter

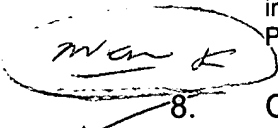
- 54-60
5. Claims ~~54-60~~ are allowed. *Reason not does not include any conditions/limitations by rely on the claim*
6. Claim 50 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

New Rejection

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

 8. Claims 47-49, ⁵¹52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertram et al (US 4,792,493) in view of Ranney et al (US 4015,044).

Bertram teaches the treatment of concrete or metal surfaces to yield surfaces having polyurethane intermediate layers and polyvinyl chloride (PVC) inner layers bonded thereto (abstract). The PVC layer may be prepared by flame or corona treatment (col. 4, lines 32-36) and coating it with a polyurethane primer-activator (col. 4, lines 42+). Bertram's pretreatment of PVC suggests its impregnation with a bonding agent.

Bertram fails to teach the use of silanes in the intermediate layer.

Ranney teaches that silanes may be incorporated in polyurethane sealants to promote their bonding to substrates (abstract). It teaches that the polyurethanes are formed by the reaction of isocyanates and polyols (col. 2, lines 32+). Metal and mineral substrates are taught at col. 1, lines 7-8.

The references are analogous because they both teach the bonding of polyurethanes to mineral or metal substrates.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the silanes of Ranney in the polyurethanes of Bertram or the isocyanate-containing precursors thereof, in order to promote the bonding of the polyurethanes to the metal or mineral substrates being treated by Bertram.

The motivation to employ the silanes of Ranney in the compositions of Bertram is found in the Ranney abstract, where the use of silanes to promote the adhesion of polyurethanes to a variety of substrates is taught.

It is deemed desirable to improve the adhesion of polyurethanes to substrates in order to improve the interlayer bonding in the treated substrates.

The use of the silanes of Ranney in the precursors to Bertram's polyurethanes--i.e., in the polyol and/or isocyanate reactants--would be efficacious because of the thixotropic nature of preformed polyurethanes.

It is well known that cement and concrete contain minerals.

Response to Arguments

9. Applicant's arguments with respect to claims 47-49 and 52-53 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication should be directed to the Examiner, Sandra M. Nolan, whose telephone number is 703/308-9545. The Examiner can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

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If attempts to reach the Examiner by telephone are unsuccessful, her supervisor, Harold Pyon, can be reached at 703/308-4251. The general fax number for the art unit is 703/305-5436. The fax number for after final communications is 703/872-9310. The receptionist answers 703/308-0661.



S. M. Nolan
Patent Examiner
Technology Center 1700

SMN/smn
09097221(23)
June 27, 2002